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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/887,848

06/22/2001

Robert C. Newman JR.

P99-16

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7590

05/19/2004

Patent Department
Lutron Electronics Company, Inc.
7200 Suter Road
Coopersburg, PA 18036-1299

EXAMINER

LEE, WILSON

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/887,848	NEWMAN ET AL.	
	Examiner	Art Unit	
	Wilson Lee	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14,15,17-24,32,33 and 35 is/are allowed.
- 6) ☒ Claim(s) 16,25-27,29,34 and 36 is/are rejected.
- 7) ☒ Claim(s) 28,30,31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Remarks

Due to the an updated search and further consideration, an office action is written as follows.

Claim Rejections – 35 U.S.C. 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 34 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claims 34 and 36, “of the *type*” is a relative terminology that renders the claimed invention indefinite. See MPEP 2173.05 (b).

Claim Rejections – 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 25-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Church et al. (6,023,037).

Regarding Claim 16, Church discloses an electronic ballast including a valley-fill circuit (20) (See Col. 2, line 59 to Col. 3, line 15) including a bus capacitor (30), the ballast having integral over-voltage protection (monitored by voltage sensor 70) for the bus capacitor, the ballast comprising: a rectifier (14), an inverter (40), and said valley-fill

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circuit connected between the rectifier (14) and the inverter (40), the valley-fill circuit including a buck converter (See Figure 2A) connected between an output of the rectifier (14) and an input of the inverter (40).

As discussed above, Church essentially discloses the claimed invention but fails to explicitly disclose the load is a discharge lamp. However, since the discharge lamp is a preamble that is generally not accorded any patentable weight where it merely recites the purpose of the intended use of a structure and where the body of the claim does not depend on the preamble for completeness. See *In re Hirao*, 535 F. 2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F. 2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). It would have been obvious to one of ordinary skill in the art to use Church for discharge lamp as an intended use in order to acquire the advantage of power correcting.

Regarding Claim 25, Church discloses an electronic ballast comprising:

- a rectifier (14) for receiving a supply of sinusoidal alternating current power (from 10), and producing a rectified direct current bus voltage;
- a valley-fill circuit for receiving the rectified direct current bus voltage and maintaining the bus voltage above a predetermined minimum voltage;
- an inverter (40) for receiving the bus voltage and producing a high-frequency AC voltage for driving the load; and
- a control circuit (140) (See Figure 2) for producing control signals to control the operation of the inverter (40);

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- said valley-fill circuit (20) including an energy storage element (30), an impedance (on inductance 62), and a switch (60);
- said energy storage element adapted to be connected between the bus voltage (22) and a circuit common (upper terminal of diode 64) by means (62) of the impedance when the switch (60) is in a first predetermined conductive state so as to store energy.

As discussed above, Church essentially discloses the claimed invention but fails to explicitly disclose the load is a discharge lamp. However, since the discharge lamp is a preamble that is generally not accorded any patentable weight where it merely recites the purpose of the intended use of a structure and where the body of the claim does not depend on the preamble for completeness. See *In re Hirao*, 535 F. 2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F. 2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). It would have been obvious to one of ordinary skill in the art to use Church for discharge lamp as an intended use in order to acquire the advantage of power correcting.

Regarding Claim 26, Church discloses that the energy storage element comprises a capacitor (30) (See Figure 2).

Regarding Claim 27, Church discloses that the impedance comprises an inductor (62) (See Figure 2).

Regarding Claim 29, Church discloses that the switch comprises a field-effect transistor (60) (See Figure 2).

Allowable subject matter

Claims 28, 30, 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 14, 15, 17-24, 32, 33, 35 are allowed.

The following is an examiner's statement of reasons for allowance:

a means for varying said duty cycle D responsive to said bus voltage to cause said energy storage device to draw more current from said AC power supply around the peak of each half-cycle of said bus voltage and to cause said energy storage device to draw less current from said AC power supply around the trough of each half-cycle of said bus voltage such as required by claim 14;

a cat ear power supply for supplying power to the control circuit, said power supply adapted to draw power from the supply of sinusoidal alternating current power only during a predetermined portion of each half-cycle of the sinusoidal alternating current power such as required by claim 17;

a power supply operatively connected to draw power from said supply of sinusoidal alternating current power, said power supply further operatively connected to supply power to said control circuit, said power supply being the sole source of power for said control circuit such as required by claim 32;

varying the conduction of the first controllably device in a predetermined manner within each said half-cycle, so that the energy storing device draws more current from the AC supply during the middle portion of each said half-cycle, and less current from

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the AC supply during the beginning and ending portions of each said half-cycle such as required by claim 35.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 34 and 36 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blankenship (6,091,612) discloses an universal power supply for arc welder.

Correspondence

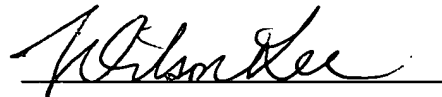
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824.

Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The official fax number is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Wilson Lee", is written over a horizontal line.

Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

5/17/04